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MORGAN & FINNEGAN, L.L.P. 3 WORLD FINANCIAL CENTER NEW YORK, NY 10281-2101			QUIETT, CARRAMAH J	
			ART UNIT	PAPER NUMBER
			2612	

DATE MAILED: 07/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/028,448

Applicant(s)

SUDA, YASUO

Examiner

Carramah J. Quiett

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) 2, 6, 13, 17, 22, 26 and 31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3-5, 7-9, 12, 14-16, 18-21, 23-25, 27-30, 32 and 33 is/are rejected.
- 7) ☒ Claim(s) 10 and 11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                                                            |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                                                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                                                       | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/11/02 &amp; 9/15/04</u> . | 6) <input type="checkbox"/> Other: _____                                                |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election without traverse of the third species (Figures 23-27), which is described in claims 1, 3-5, 7, 9-12, 14-16, 18-21, 23-25, 27-30, 32 and 33 in the reply filed on April 25, 2005 is acknowledged. Additionally, the Examiner has decided to examine claim 8 along with the claims elected by the Applicant.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

### ***Priority***

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Information Disclosure Statement***

3. The information disclosure statements (IDS), filed on 02/11/2002 and 09/15/2004, have been placed in the application file, and the information referred to therein has been considered as to the merits.

***Specification***

4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 10 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. Claim 10 recites the limitation "...the first and second image sensing areas are separated  $a \times h \times c$  in the horizontal direction and  $b \times c$  in the vertical direction..." in the claims on page 91, lines 21-23 on. What is  $c$ ? There is insufficient antecedent basis for this limitation ( $c$ ) in the claim.

8. Claim 11 is rejected as being dependent upon the rejected claim 10.

***Claim Rejections - 35 USC § 101***

9. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

10. Claims 21, 23-25, and 27-29 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. It is improper to not have a recording

medium to store the control program to perform the code of the steps claimed in claims 21, 23-25, and 27-29.

***Claim Rejections - 35 USC § 102***

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

12. **Claims 1 and 12**, are rejected under 35 U.S.C. 102(e) as being anticipated by Yu et al. (U.S. Pat. #6,611,289).

As for **claim 1**, Yu discloses an image sensing apparatus (fig. 3) comprising:

a plurality of apertures (fig. 3, refs. 310,312,314,316) that receives external light from different positions (col. 5, line 5-39);

a plurality of image sensing units (fig. 3, refs. 302,304,306,308) that outputs image signals obtained by independently receiving light that comes from an identical position of an object and is received via said plurality of apertures, and independently extracting predetermined color components for each received light. Please read col. 4, lines 62 – col. 5, lines 39; and

a signal processing device (fig. 3, refs. 328, 338, 350, and 360) that forms a signal that outputs an object image by mixing the image signals output from said plurality of image sensing units (col. 5, lines 41-52; col. 5, lines 58-61; col. 6, lines 44-65; col. 7, lines 8-17), wherein upon forming the signal that outputs the object image, said signal processing device determines a

position deviation state, which occurs between the image signals, and corrects the position deviation state by a signal process, and forms the signal that outputs the object image (col. 7, line 60 – col. 8, line 64). Also, please see figs. 5, 6, & 8 and read col. 9, line 53 – col. 10, line 16.

As for **claim 12**, Yu teaches a method of controlling an image sensing apparatus (col. 6, lines 44-65), which comprises a plurality of apertures (fig. 3, refs. 310,312,314,316) for receiving external light from different positions (col. 5, line 5-39), and a plurality of image sensing units (fig. 3, refs. 302,304,306,308) for outputting image signals obtained by independently receiving light that comes from an identical position of an object and is received via said plurality of apertures, and independently extracting predetermined color components for each received light (col. 4, lines 62 – col. 5, lines 39), comprising the step of:

forming a signal that outputs an object image by mixing the image signals output from said plurality of image sensing units (col. 7, lines 47-59), upon forming the signal that outputs the object image, determining a position deviation state which occurs between the image signals and correcting the position deviation state by a signal process and forming the signal that outputs the object image (col. 7, line 60 – col. 8, line 64). Also, please see figs. 5, 6, & 8 and read col. 9, line 53 – col. 10, line 16.

### ***Claim Rejections - 35 USC § 103***

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. **Claims 3-5, 7-9 and 14-16, 18-20, 23-25, 27-29, and 32-33** are rejected under 35 U.S.C. 103(a) as being unpatentable over Yu et al. (U.S. Pat. #6,611,289) in view of Parulski (U.S. Pat. 5,523,786).

For **claim 3**, Yu discloses an apparatus wherein said signal processing device determines the position deviation (color misregistration) based on motion vectors (col. 8, lines 10-55). However, Yu does not expressly teach determining the position deviation state based on an object distance. In a similar field of endeavor, Parulski discloses an apparatus wherein a signal processing device (fig. 7, refs. 22/68) determines the position deviation state based on an object distance (col. 6, lines 8-62). As illustrated in figs. 11A-11C, signals are read from the image sensor for object data at normal distances, near distances and far distances. In light of the teaching of Parulski, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the signal processor of Yu to determine the position deviation state based on an object distance in order to decrease power consumption as well as providing better resolution, motion portrayal with fewer colored edge artifacts (Parulski, col. 2, lines 54-62 and col. 6, lines 30-39).

For **claim 4**, Yu discloses an apparatus wherein said signal processing device determines the position deviation state (color misregistration) based on motion vectors (col. 8, lines 10-55). In particular, Yu teaches that the signal processing device detects the color misregistration by comparing image signals from a plurality of image sensing units which extract an identical color component of said plurality of image sensing units (col. 6, lines 12-43). Yu explains that if one of the sensors (green) is found over exposed, the digital processing circuitry analyzes the image to produce a color (green) that is properly exposed (col. 6, lines 30-43). However, Yu does not

expressly teach detecting object distance. In a similar field of endeavor, Parulski teaches that a signal processing device detects object distance (col. 6, lines 8-62). As illustrated in figs. 11A-11C, signals are read from the image sensor for object data at normal distances, near distances and far distances. In light of the teaching of Parulski, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the signal processor of Yu to detect object distance in order to decrease power consumption as well as providing better resolution, motion portrayal with fewer colored edge artifacts (Parulski, col. 2, lines 54-62 and col. 6, lines 30-39).

For **claim 5**, Yu discloses an apparatus wherein said signal processing device determines the position deviation state (color misregistration) based on motion vectors (col. 8, lines 10-55). However, Yu does not expressly teach determining the position deviation state in response to setting of a near-distance photographing mode. In a similar field of endeavor, Parulski teaches that a signal processing device determines the position deviation state in response to setting of a near-distance photographing mode (figs. 11A-11C; col. 6, lines 8-62). In light of the teaching of Parulski, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the signal processor of Yu to determines the position deviation state in response to setting of a near-distance photographing mode in order to decrease power consumption as well as providing better resolution, motion portrayal with fewer colored edge artifacts (Parulski, col. 2, lines 54-62 and col. 6, lines 30-39).

As for **claim 7**, Yu discloses an image sensing apparatus (fig. 3) comprising:

an image sensing element (fig. 3, refs. 302,304,306,308) having a plurality of image sensing areas (col. 4, lines 62 – col. 5, lines 39);



a photographing optical system (fig. 3, refs. 310,312,314,316) that forms object images on the plurality of image sensing areas via a plurality of imaging systems corresponding to the plurality of image sensing areas (col. 5, line 5-39); and

a signal processing device (fig. 3, refs. 328, 338, 350, and 360) that forms a signal that outputs an object image by mixing image signals output from the plurality of image sensing areas of said image sensing element (col. 5, lines 41-52; col. 5, lines 58-61; col. 6, lines 44-65; col. 7, lines 8-17), and forms the signal that outputs the object image (col. 7, line 60 – col. 8, line 64). Also, please see figs. 5, 6, & 8 and read col. 9, line 53 – col. 10, line 16. Yu discloses an apparatus wherein said signal processing device determines the position deviation state (color misregistration) based on motion vectors (col. 8, lines 10-55). However, Yu does not expressly disclose a signal processing device that corrects a position deviation between the image signals in accordance with an object distance upon forming the signal that outputs the object image.

In a similar field of endeavor, Parulski teaches that a signal processing device (fig. 7, refs. 22/68) corrects a position deviation between the image signals in accordance with an object distance upon forming the signal that outputs the object image (col. 6, lines 8-62). As illustrated in figs. 11A-11C, signals are read from the image sensor for object data at normal distances, near distances and far distances. In light of the teaching of Parulski, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the signal processor of Yu to correct the position deviation state based on an object distance in order to decrease power consumption as well as providing better resolution, motion portrayal with fewer colored edge artifacts (Parulski, col. 2, lines 54-62 and col. 6, lines 30-39).

For **claim 8**, Yu teaches an apparatus that determines the position deviation (color misregistration) based on motion vectors (col. 8, lines 10-55). Yu does not expressly disclose an apparatus further comprising a distance measurement unit that detects the object distance. In a similar field of endeavor, Parulski teaches that a distance-measuring sensor (fig. 3, refs. 26a-c, 28, 40, 42) detects the object distance (col. 5, line 55 – col. 6, line 7). As illustrated in figs. 11A-11C, signals are read from the image sensor for object data at normal distances, near distances and far distances. In light of the teaching of Parulski, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the imaging apparatus of Yu to with a means for detecting the object distance in order to decrease power consumption as well as providing better resolution, motion portrayal with fewer colored edge artifacts (Parulski, col. 2, lines 54-62 and col. 6, lines 30-39).

As for **claim 9**, Yu discloses an image sensing apparatus (fig. 3) comprising:

an image sensing element (fig. 3, refs. 302,304,306,308) having a plurality of image sensing areas (col. 4, lines 62 – col. 5, lines 39);

a photographing optical system (fig. 3, refs. 310,312,314,316) that forms object images on the plurality of image sensing areas via a plurality of imaging systems corresponding to the plurality of image sensing areas (col. 5, line 5-39); and

a signal processing device (fig. 3, refs. 328, 338, 350, and 360) that forms a signal that outputs an object image by mixing image signals output from the plurality of image sensing areas of said image sensing element (col. 5, lines 41-52; col. 5, lines 58-61; col. 6, lines 44-65; col. 7, lines 8-17), and forms the signal that outputs the object image (col. 7, line 60 – col. 8, line 64). Also, please see figs. 5, 6, & 8 and read col. 9, line 53 – col. 10, line 16. Yu teaches that

Art Unit: 2612

the position deviation state is determined based on motion vectors (col. 8, lines 10-55).

However, Yu does not expressly disclose a signal processing device that corrects a position deviation between the image signals in response to setting of a near-distance photographing mode upon forming the signal that outputs the object image.

In a similar field of endeavor, Parulski teaches that a signal processing device corrects a position deviation between the image signals in response to setting of a near-distance photographing mode upon forming the signal that outputs the object image (figs. 11A-11C; col. 6, lines 8-62). In light of the teaching of Parulski, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the signal processor of Yu to determine the position deviation state in response to setting of a near-distance photographing mode in order to decrease power consumption as well as providing better resolution, motion portrayal with fewer colored edge artifacts (Parulski, col. 2, lines 54-62 and col. 6, lines 30-39).

Regarding **claims 14-16**, these claims are method claims corresponding to the apparatus claims 3-5, respectively. Therefore, method claims 14-16 are analyzed and rejected as previously discussed with respect to claims 3-5, respectively.

As for **claim 18**, Yu teaches a method of controlling an image sensing apparatus (col. 6, lines 44-65), which comprises an image sensing element (fig. 3, refs. 302,304,306,308) having a plurality of image sensing areas (col. 4, lines 62 – col. 5, lines 39), and a photographing optical system (fig. 3, refs. 310,312,314,316) for forming object images on the plurality of image sensing areas via a plurality of imaging systems corresponding to the plurality of image sensing areas (col. 5, lines 5-39), comprising the step of:

forming a signal that outputs an object image by mixing image signals output from the plurality of image sensing areas of said image sensing element (col. 5, lines 41-52; col. 5, lines 58-61; col. 6, lines 44-65; col. 7, lines 8-17), and forming the signal that outputs the object image (col. 7, line 60 – col. 8, line 64). Also, please read col. 9, line 53 – col. 10, line 16. Yu teaches that the position deviation state is adjusted based on motion vectors (col. 8, lines 10-55). However, Yu does not expressly teach correcting a position deviation between the image signals in accordance with an object distance upon forming the signal that outputs the object image.

In a similar field of endeavor, Parulski teaches correcting a position deviation between the image signals in accordance with an object distance upon forming the signal that outputs the object image (col. 6, lines 8-62). As illustrated in figs. 11A-11C, signals are read from the image sensor for object data at normal distances, near distances and far distances. In light of the teaching of Parulski, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the imaging apparatus of Yu with a method for correcting the position deviation state based on object distance in order to decrease power consumption as well as providing better resolution, motion portrayal with fewer colored edge artifacts (Parulski, col. 2, lines 54-62 and col. 6, lines 30-39).

Regarding **claim 19**, this claim is a method claim corresponding to an apparatus claim 8. Therefore, method claim 19 is analyzed and rejected as previously discussed with respect to claim 8.

As for **claim 20**, Yu teaches a method of controlling an image sensing apparatus (col. 6, lines 44-65), which comprises an image sensing element (fig. 3, refs. 302,304,306,308) having a plurality of image sensing areas (col. 4, lines 62 – col. 5, lines 39), and a photographing optical

Art Unit: 2612

system (fig. 3, refs. 310,312,314,316) for forming object images on the plurality of image sensing areas via a plurality of imaging systems corresponding to the plurality of image sensing areas (col. 5, lines 5-39), comprising the step of:

forming a signal that outputs an object image by mixing image signals output from the plurality of image sensing areas of said image sensing element (col. 5, lines 41-52; col. 5, lines 58-61; col. 6, lines 44-65; col. 7, lines 8-17), and forms the signal that outputs the object image (col. 7, line 60 – col. 8, line 64). Also, please read col. 9, line 53 – col. 10, line 16. Yu teaches that the position deviation state is adjusted based on motion vectors (col. 8, lines 10-55). However, Yu does not expressly teach correcting a position deviation between the image signals in response to setting of a near-distance photographing mode upon forming the signal that outputs the object image.

In a similar field of endeavor, Parulski teaches correcting a position deviation between the image signals in response to setting of a near-distance photographing mode upon forming the signal that outputs the object image, and forms the signal that outputs the object image (col. 6, lines 8-62). In light of the teaching of Parulski, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the imaging apparatus of Yu with a method for correcting the position deviation state in response to setting of a near-distance photographing mode in order to decrease power consumption as well as providing better resolution, motion portrayal with fewer colored edge artifacts (Parulski, col. 2, lines 54-62 and col. 6, lines 30-39).

Regarding **claims 23-25**, these claims are program claims corresponding to the apparatus claims 3-5, respectively. Therefore, program claims 23-25 are analyzed and rejected as previously discussed with respect to claims 3-5, respectively.

As to **claims 27 and 32**, the claimed limitations in claim 27 can be found in the method claim 18. Claims 27 and 32 differ from Yu, as modified by, Parulski in that the claim requires a control program comprising a code to perform the steps claimed in the method claim 18.

Official Notice is taken that it is well known in the art to embody instructions in software to execute on a computer. Therefore, it would have been obvious to one of ordinary skill in the art to modify the image sensing apparatus taught in Yu by having a control program comprising a code to perform the steps claimed in the method claim 18.

As to **claim 28**, the claimed limitations in this claim can be found in the apparatus claim 8/method claim 19. Claim 28 differs from Yu, as modified by, Parulski in that the claim requires a program according to claim 27 comprising a code to perform the steps claimed in the apparatus claim 8/method claim 19. Official Notice is taken that it is well known in the art to embody instructions in software to execute on a computer. Therefore, it would have been obvious to one of ordinary skill in the art to modify the image sensing apparatus taught in Yu by having a control program comprising a code to perform the steps claimed in the apparatus claim 8/method claim 19.

As to **claims 29 and 33**, the claimed limitations in claim 29 can be found in the method claim 20. Claims 29 and 33 differ from Yu, as modified by, Parulski in that the claim requires a control program comprising a code to perform the steps claimed in the method claim 20.

Official Notice is taken that it is well known in the art to embody instructions in software to

Art Unit: 2612

execute on a computer. Therefore, it would have been obvious to one of ordinary skill in the art to modify the image sensing apparatus taught in Yu by having a control program comprising a code to perform the steps claimed in the method claim 20.

15. **Claims 21 and 30** are rejected under 35 U.S.C. 103(a) as being unpatentable over Yu et al. (U.S. Pat. #6,611,289).

As to **claims 21 and 30**, the claimed limitations in claim 21 can be found in the method claim 12. Claims 21 and 30 differ from Yu in that the claim requires a control program comprising a code to perform the steps claimed in the method claim 12. Official Notice is taken that it is well known in the art to embody instructions in software to execute on a computer. Therefore, it would have been obvious to one of ordinary skill in the art to modify the image sensing apparatus taught in Yu by having a control program comprising a code to perform the steps claimed in the method claim 12.

***Allowable Subject Matter***

16. **Claims 10-11** would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

17. The following is a statement of reasons for the indication of allowable subject matter:

**Claim 10** is allowed because the prior art does not teach or fairly suggest an image sensing apparatus comprising:

an image sensing element having first and second image sensing areas with substantially the same size on a single plane;

a photographing optical system that respectively forms first and second object images on the first and second image sensing areas; and

a signal processing device that processes an output signal from said image sensing element,

wherein each of the first and second image sensing areas has a matrix of a plurality of pixels arranged at a pitch  $a$  in the horizontal direction and a pitch  $b$  in the vertical direction on a light-receiving surface, *the first and second image sensing areas have a positional relationship in which the first and second image sensing areas are separated  $a \times h \times c$  in the horizontal direction and  $b \times c$  in the vertical direction (where  $h$  is a positive integer), said image sensing element forms first and second images which are formed to have an identical spectral distribution and have substantially the same fields of view, and said signal processing device generates a composite image signal based on the first and second images.*

**Claim 11** is allowed because is it dependent on claim 10.

### *Conclusion*

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Dischert et al. (2001/0030697)	A system for detecting and measuring registration errors and chromatic aberration in color images.
Hattori (5,398,058)	Color image pickup device with a color separation system.
Akiyama et al. (5,081,525))	Apparatus with a registration discrepancy compensation



Art Unit: 2612

circuit.

Murayama et al. (4,903,067)	Apparatus with positional deviation correction.
Fenster et al. (4,641,352)	Misregistration correction system.
Fenster et al. (4,685,146)	Automatic misregistration correction system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carramah J. Quiett whose telephone number is (571) 272-7316. The examiner can normally be reached on 8:00-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on (571) 272-7308. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CJQ  
July 25, 2005

  
NGOC-YEN VU  
PRIMARY EXAMINER